Newark, New Jersey Brownfields Assessment Demonstration Pilot

U. S. EPA, Region 2 290 Broadway New York, NY

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Program Information

The EPA Brownfields Economic Redevelopment Initiative is designed to empower States, communities, and other stakeholders in economic redevelopment to work together in a timely manner to prevent, assess, safely clean up, and sustainably reuse brownfields. A brownfield is an abandoned, idled, or under-used industrial or commercial facility where expansion or redevelopment is complicated by real or perceived contamination. Since 1995, EPA has funded more than 300 Brownfields Assessment Demonstration Pilots, at up to \$200,000 each, enabling localities to clarify environmental contamination issues in order to facilitate redevelopment. Pilot funds are for site assessment, reuse planning and related community involvement. EPA Region 2 provides direct support to the States, Tribes, counties, municipalities, and communities of New York, New Jersey, Puerto Rico and the US Virgin Islands as they continue to seek new methods to promote site assessment, environmental cleanup, and redevelopment.

I. Overview

In October 1996, U.S. Environmental Protection Agency (EPA) selected the City of Newark, New Jersey, as a Brownfields Assessment Demonstration Pilot. Industrial decline, disinvestment, and suburbanization of northern New Jersey after World War II left Newark (population 275,000, New Jersey's largest city) with more than 700 acres of largely abandoned and underutilized public and private property. These properties are known or suspected to be contaminated from industrial operations and manufacturing. During the 1980's the city lost 60,000 residents, and 26 percent of the remaining residents are at or below the poverty level. Newark has been designated a Federal Enterprise Community and an Urban Enterprise Zone.

The focus of the City's Brownfields Pilot was to produce a pipeline of clean, redeveloped sites to return to productive use, generate tax revenue, and increase space available for business expansion and new jobs. This pilot was completed in September 1999 and a final report was submitted to EPA by Newark Economic Development Corporation (NEDC). The pilot consisted of six "Brownfields Demonstration Sites" that were selected to demonstrate innovative remediation technologies, two area wide characterizations that used innovative technologies to characterize the contaminants at the sites, and the development of a web-based, user-friendly Geographic Information System (GIS).

II. Brownfields Pilot Progress

Implementation Strategy

In April 1997, the Newark City Council authorized the Mayor and the Director of the Newark Department of Engineering to enter into an agreement with the NEDC to manage the Brownfields Demonstration Project. To conduct Pilot tasks, NEDC then entered into subcontracts with several project partners, such as the Regional Plan Association (RPA) of New York and New Jersey, Ironbound Community Corporation (ICC), and the Greater Newark Conservancy (GNC).

A Brownfields Steering Committee was formed that consisted of representatives from the City of Newark's Department of Engineering and Development, NEDC, EPA, New Jersey Department of Environmental Protection (NJDEP), RPA, New Jersey Institute of Technology (NJIT), Newark Housing Authority (NHA), La Casa de Don Pedro, ICC, Donald Jackson Neighborhood Corporation, and GNC. Subcommittees were subsequently formed to follow project objectives and report their actions at monthly Steering Committee meetings. An Executive Group was also established, which met periodically to establish and monitor goals, objectives and performance for the Steering Committee.

The Newark Brownfields Initiative coordinated the leveraging of resources with the end-goal of successful remediation and redevelopment of Newark properties, both private and city-owned. The City partnered with NJIT to demonstrate the potential of innovative technologies to characterize and remediate some of Newark's brownfields. By the end of the Pilot project period, Newark had also received 20 Hazardous Discharge Site Remediation Fund (HDSRF) grants from New Jersey's Economic Development Authority (NJEDA) to perform preliminary assessments (PA) and site investigations (SI) of city-owned brownfield properties.

Community Involvement

The City of Newark held Stakeholder Workshops in the South Ward, Ironbound, and East Ward sections of the city to educate and involve citizens in the brownfields process. NJIT presented seminars on Brownfields issues, including site investigation and remediation to government officials from NHA, EPA, NJDEP and other agencies. The City also prepared brochures in English, Spanish, and Portugese.

The NEDC also informed stakeholders of important pilot developments through the *Newark Brownfields* newsletter published on a quarterly basis. The last issue was distributed in June 1999. Based on existing information on site contamination and cleanup status, NEDC also prepared and disseminated brownfields site maps and fact sheets for the six Pilot sites.

III. Brownfields Site Activities

Site Inventory

The Newark Department of Engineering completed an inventory of brownfields sites which was entered into the City of Newark's GIS. The inventory includes 72 sites from the NJDEP's Known Contaminated Site list, selected with the following criteria: municipally owned sites that have received HDSRF grants to investigate environmental concerns, sites that received Economic Development Agency Innocent Party grants to address environmental concerns, and active sites identified by department case managers as being brownfields. The web-based GIS was developed to make brownfields site data available to community, business, and public stakeholders. Under this Pilot, the GIS was developed to include user-friendly queries that produce graphic and tabular output on brownfields and other development sites.

Site Selection

The City of Newark met with local community groups and held workshops which involved public assistance in site selection.

Site Assessment and Reuse Planning

With the six Brownfields Demonstration Sites, the Brownfields Initiative aimed to document that the use of innovative treatment methods could potentially reduce remediation costs. The following are site-specific descriptions of the activities performed under the pilot. These sites were all previously characterized under various federal and state programs.

Albert Steel Drum: This 13.7-acre site, owned by the Newark Housing Authority, is located at 338 Wilson Avenue. Former activities at the site include a drum reconditioning factory and a pesticide and specialty chemical manufacturer. This site has undergone a remedial action to remove soil contaminated with arsenic and dioxin. At the conclusion of the pilot, a cap was being designed for installation. Once the site has been remediated, the site will be auctioned by the City.

Arkansas Chemical: This 1.7-acre site, owned by the City, is located at 171-185 Foundry Street. This site was a former textile chemical factory which went bankrupt in 1983. A PA/SI funded by NJEDA HDSRF was completed. This site was part of the NJIT innovative technology demonstration of soil washing. NJIT concluded that soil washing is a viable innovative technology for remediation at this site. The City is attempting to resolve indemnity issues so the property can be transferred to Sun Chemical, which owns the adjacent property.

Dupont: This 37-acre site, owned by the Dupont Chemical Company, is located at 192-272 Avenue P. This site was a former coal tar manufacturing facility. Dupont has completed a PA and submitted the SI/RI work plan to NJDEP. Dupont is working with NJDEP to arrive at a suitable and timely remedy for this site.

Scientific Chemical Processing: This 4-acre site, owned by the City, is located at 411 Wilson Avenue. Scientific Chemical Processing previously recovered waste solvents, polychlorinated biphenyls (PCB), fuels, and other hazardous wastes. The City has completed all site investigation work and approximately 30 areas of concern have been identified. This site was also part of the area wide characterization study. NJIT concluded that phytoremediation and soil washing are viable innovative technologies for the remediation of this site.

140 Thomas Street: This 4.7-acre site, owned by the City, is located at 140-170 Thomas Street. Former tenants of the manufacturing and warehouse facility and engaged in storage and handling of hazardous materials. At the end of the pilot project period, this site was under litigation and no work had yet been performed there.

White Chemical: This 4.4-acre site, owned by the City, is located at 660 Frelinghuysen. White Chemical manufactured acid chlorides and alkyl bromides from 1983 to 1990. NJIT concluded that phytoremediation, soil washing, and electrokinetics are viable innovative technologies for the remediation of this site. This site may be redeveloped as part of the Newark Airport Support Zone.

Area Wide Site Characterization

The City of Newark also used innovative technologies to characterize large areas of the City's South and East Wards. The Pilot aimed to document the potential for innovative assessment methods which reduce the cost of data collection and increase the amount of information available at early stages. The Area Wide Site Characterization involved the reconnaissance and site investigation of several properties within selected areas of Newark using innovative

technologies in conjunction with traditional procedures. The goal of this approach was to demonstrate that the data generated by the use of innovative technologies is compatible with traditional approaches and acceptable to regulatory agencies. Technologies evaluated include: field gas chromatography, mass spectrometry, and microwave induced plasma (GC/MS/MIP); field test kits; x-ray fluorescence (XRF); iridium-based mercury microelectrode; and laser fluorescence probe/cone penetrometer.

Each study focused on several city-owned sites with significant potential redevelopment value. The investigation of the East Ward was postponed due to scheduling conflicts and was removed from the Brownfields Pilot by EPA. The investigation of the South Ward is complete and included the following sites: Market Street School, Synfax, Central Steel Drum, Raven Rubber, and Scientific Chemical.

IV. Measures of Success

Properties Estimated in Brownfields Pilot Areas: 72

For the entire Pilot area, the number of properties/parcels which have been identified by the Pilot as brownfields. The Pilot area includes the entire jurisdiction of the Pilot (e.g., the entire City of Chicago or the State of Minnesota), not just the specific area(s) that the Pilot has defined as target areas.

Properties Reported to be Contained in Pilot Inventories: 72

For the entire Pilot area, the number of properties/parcels which have been included in an inventory of brownfields properties/parcels. Types of brownfields inventories include: lists, spreadsheets, and databases (geographic information systems or other forms). These inventories may include lists such as a foreclosure list of abandoned industrial sites; a state list of no-further actions sites, etc.

Properties Reported to be Targeted by Pilots: 10

For the entire Pilot area, the number of brownfields properties/parcels the Pilot reports it is "targeting", or at which the Pilot says it will conduct, is conducting, or has conducted activities such as assessment, cleanup planning, facilitation of redevelopment, community outreach, etc.

V. Non-Site Specific Funding Leveraged

Funding that has been leveraged under the pilot program, but cannot be attributed to any one site.

	Site Specific Funding Leveraged for <u>Assessment</u> Funded by: □ Local (City) □ Local (County) □ Private ■ State □ Other Federal
A	Amount Funded: \$ <u>1,310,655</u>
A	Additional information concerning funding:
	Site Specific Funding Leveraged for <u>Cleanup</u> Funded by: Local (City) Local (County) Private State Other Federal
A	Amount Funded: \$
Д	Additional information concerning funding:

C. Non-Site Specific Funding Leveraged for Redevelopment

Funded by: \square Local (City) \square Local (County) \square Private \square State \square Other Federal

Amount Funded: \$_____

Additional information concerning funding:

VI. Current Activities

This pilot was completed in September 1999.

VII. Contact Information

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